

REMARKS

Claims 1, 2 and 4-7 are pending in the present application. Claims 5-7 are withdrawn from consideration. Claims 1, 2 and 4 are rejected. Claims 1 and 2 are herein amended. No new matter has been presented.

Claim Rejections - 35 U.S.C. §102(b)

Claims 1-2 and 4 are rejected under 35 U.S.C. §102(b) as being anticipated by Fukuda (US Publication No. 2003/0113479).

The Examiner asserts that Fukuda et al. teach a production method that comprises placing a glass substrate in an atmospheric pressure plasma generating apparatus (title, abstract). The apparatus is adapted to generate an atmospheric plasma between electrodes thereof as noted in the Figures and paragraphs [0097], [0075] and [0105], and this allows for treatment of the substrate with atmospheric pressure plasma as noted in paragraphs [0129]-[0131].

The Examiner further asserts that Fukuda et al. teach that an ambient gas (gas environment surrounding the substrate) used for the pressure plasma can be comprised of an inert argon or nitrogen gas, as noted in paragraphs [0059]-[0062], [0109]-[0110], and the plasma produced by the apparatus is what imparts the substrate with antistatic properties, as noted in paragraph [0066].

With respect to claim 2, the Examiner notes that the ambient gas can also be comprised of the above inert gas as a main component and a second gas as noted in paragraph [0109], and the second gas can be oxygen gas, as noted in paragraphs [0109]-[0111] and [0128]. Further

with respect to claim 2, the Examiner notes that the reactive gas can comprise 0.1 to 5% by volume of the total volume of gas in the apparatus, as noted in paragraph [0111].

Applicants herein amend the claims to clarify the invention. Thereafter, Applicants respectfully submit that the rejections are overcome and the claims are patentably distinct over the cited reference, because Fukuda et al. fails to teach each of the claimed limitations.

The present invention generates an atmospheric pressure plasma for treatment of an object with the atmospheric pressure plasma, using an organometallic compound-free gas selected from the group consisting of argon, helium, neon, xenon and nitrogen as an ambient gas and imparting the glass substrate with an antistatic property by the atmospheric pressure plasma generated in the apparatus without forming any layer on the surface of the glass substrate. According to the present invention, the glass substrate is provided with an antistatic property by modifying the surface portion of the glass substrate by the atmospheric pressure plasma (see page 4, lines 11 to 15 of the Specification). That is, a film is not formed on the surface of the glass substrate. Therefore, in the atmospheric pressure plasma treatment of present invention, a reactive gas containing an organometallic compound for forming a film is not used (Examples 1, 2 and Reference Example 1).

On the other hand, Fukuda et al. relates to the plasma treatment for forming films on a substrate, as noted in paragraphs [0009], [0066] and [0109]. Specifically, Fukuda et al. teaches the use of the reactive gas containing an organometallic compound for forming films, as noted in paragraph [0112].

In view of the above differences, claims 1 and 2 are amended to clarify the distinction between the present invention and the cited reference. Because claim 2 is shown as patentably distinct, and because claim 4 depends from and necessarily includes the limitations of claim 2, Applicants submit that claim 4 is similarly patentably distinguished.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



Kenneth H. Salen
Attorney for Applicants
Registration No. 43,077
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

KHS/mra